



6AB7/1853

6AB7

**TELEVISION AMPLIFIER PENTODE**

SINGLE-ENDED METAL TYPE

Heater★	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.45	amp.
Direct Interelectrode Capacitances:°		
Grid to Plate	0.015 max.	µuf
Input	8	µuf
Output	5	µuf
Maximum Overall Length		2-5/8"
Maximum Seated Height		2-1/16"
Maximum Diameter		1-5/16"
Bulb		Metal Shell, MT-8
Base		Small Wafer Octal 8-Pin
Pin 1 - Shell		Pin 5 - Cathode
Pin 2 - Heater		Pin 6 - Screen
Pin 3 - Suppressor		Pin 7 - Heater
Pin 4 - Grid		Pin 8 - Plate
Mounting Position	BOTTOM VIEW (8N)	Any

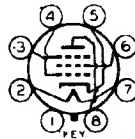
**AMPLIFIER**

Plate Voltage	300 max.	volts
Screen Voltage	200 max.	volts
Screen-Supply Voltage	300 max.	volts
Plate Dissipation °	3.75 max.	watts
Screen Dissipation	0.65 max.	watt

**Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:**

Condition I\* Condition II\*\*

Heater★	6.3	6.3	volts
Plate	300	300	volts
Suppressor □	0	0	volts
Screen-Supply #	200	300	volts
Series Screen Resistor	-	30000	ohms
Grid ## •	-3	-3	min. volts
Plate Res.	0.7	0.7	approx. megohm
Transcond.	5000	5000	µmhos
Grid Bias for transcond. = 50 µmhos	-15	-22.5	volts
Plate Cur.	12.5	12.5	ma.
Screen Cur.	3.2	3.2	ma.

° With shell connected to cathode.

\* Condition I is with fixed screen supply.

\*\* Condition II is with series screen resistor.

# Screen-supply voltages in excess of 200 volts require the use of a series-dropping resistor to limit the voltage at the screen to 200 volts when the plate current is at its normal value of 12.5 milli-amperes.

• May be obtained with cathode-bias resistor having a minimum value of 190 ohms.

## The d-c resistance in the grid circuit should not exceed 0.25 megohm with fixed bias, or 0.5 megohm with full cathode bias and a series screen resistor.

⊕ Precautions should be taken to insure that dissipation rating is not exceeded with expected line-voltage fluctuations, especially in the case of fixed-bias operation.

□ The suppressor should be connected in r-f and i-f stages directly to ground to minimize feedback.

★ The potential difference between heater and cathode should be kept as low as possible.

Note: It is characteristic of a high gm tube to show appreciable changes of input capacitance and input conductance with plate current. In high-frequency circuits, it is necessary to take precautions to minimize this effect.

← Indicates a change.

Dec. 1, 1941

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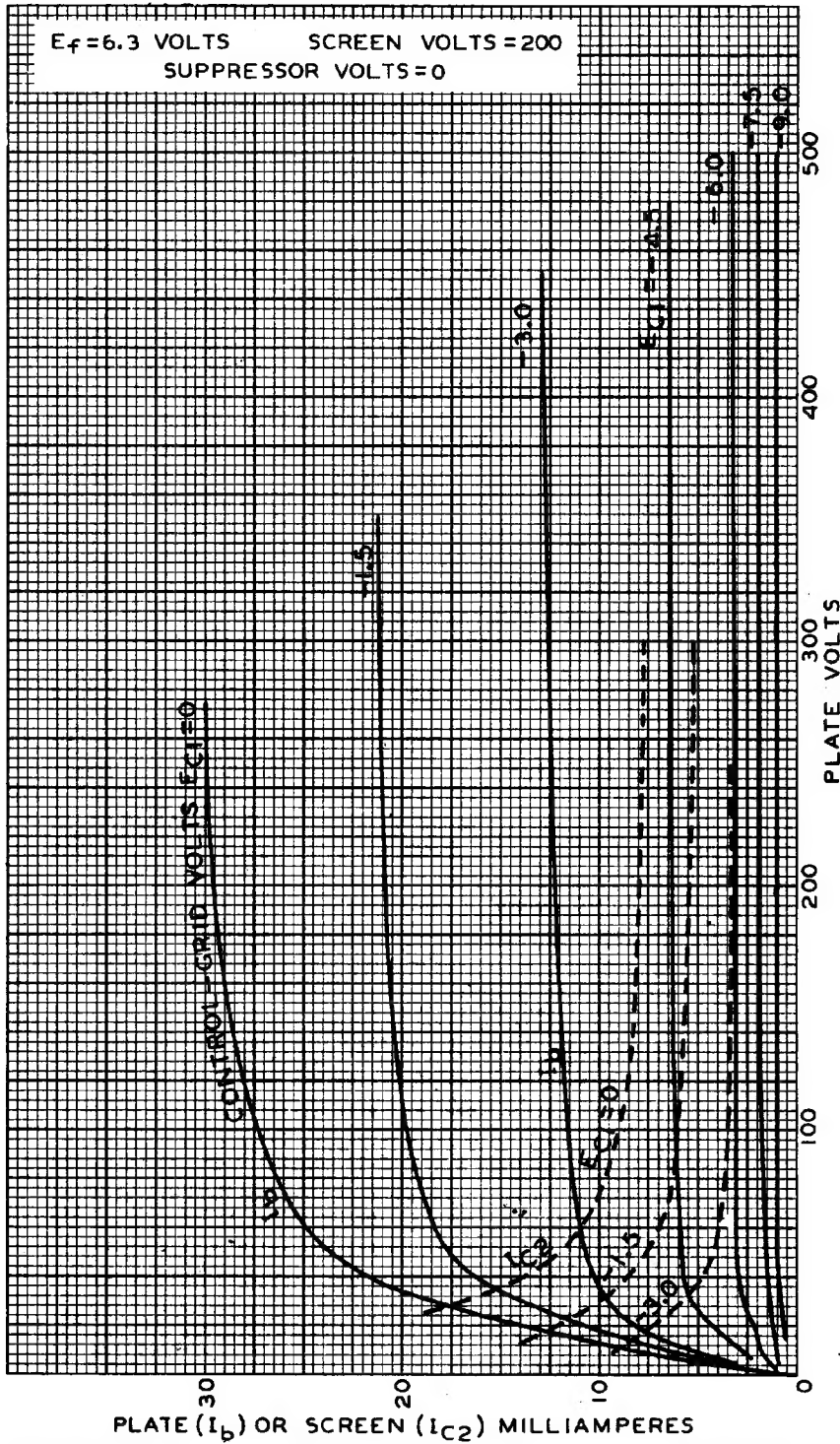
DATA

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# AVERAGE PLATE CHARACTERISTICS



JUNE 21, 1938

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92C-6140